

We Claim As Our Invention:

1. An image capture system comprising:
a portable reader subsystem operable to capture image information;
said portable reader subsystem being operable in a first mode to read coded image
information and operable in a second mode to capture photo image information;
and
a controller subsystem controlling the operation of the portable reader subsystem to
capture coded image information and photo image information.
2. The image capture system of claim 1, wherein the portable reader subsystem
has a first optical path for capture of coded images, and a second optical path for capture
of photo images.
3. The image capture system of claim 2, wherein the first optical path has a fixed
focal length.
4. The image capture system of claim 2, wherein the first optical path has an
adjustable aperture.
5. The image capture system of claim 4, where the adjustable aperture adjusts
the depth of field of the first optical path.
6. The image capture system of claim 2, wherein the second optical path has a
wider angle of view than said first optical path.
7. The image capture system of claim 2, wherein the second optical path has a
deeper field of view than said first optical path.

8. The image capture system of claim 2, wherein the first and second optical paths have respective first and second shutters.

9. The image capture system of claim 1, wherein an illumination source is operable to direct illuminating light along the first optical path so as to illuminate a target.

10. The image capture system of claim 9, wherein the illumination source is operable to direct illumination along the second optical path during capture of photo image information.

11. The image capture system of claim 1, wherein the portable reader subsystem is in the same orientation during reading of coded image information and photo image information

12. The image capture system of claim 1, where the portable reader subsystem comprises an image capture module.

13. The image capture system of claim 12, further comprising a user supported terminal subsystem for mounting the image capture module.

14. The image capture system of claim 1, said portable reader subsystem having a photo reader with a field of view directed along one axis, and having a code reader with a field of view directed along said one axis.

15. The image capture system of claim 1, said portable reader subsystem comprising a housing with plural sides, said housing, having a photo reader with a field of view extending from one side of the housing, and having a code reader with a field of view extending from said one side of the housing.

16. The image capture system of claim 15, said housing having a display at a side of the housing opposite said one side

17. The image capture system of claim 16, said display displaying at least a part of the field of view of the photo reader.

18. The image capture system of claim 1, said portable reader system having a photo reader with a field of view directed along one axis, and having a code reader with a field of view directed along a different axis.

19. The image capture system of claim 18, wherein the one axis of the photo reader and the different axis of the code reader are orthogonally related

20. The image capture system of claim 18, wherein at least a portion of the optical path of the photo reader and a portion of the optical path of the code reader are generally parallel.

21. The image capture system of claim 1, said portable reader subsystem comprising a housing with plural sides, said housing having a photo reader with a field of view extending from one side of the housing, and having a code reader with a field of view extending from another side of the housing.

22. The image capture system of claim 21, said housing having a display at a side of the housing opposite said one side.

23. The image capture system of claim 22, with at least a part of said display displaying the field of view of the photo reader.

24. The image capture system of claim 1, wherein the portable reader subsystem comprises a laser scanning device.

25. The image capture system of claim 24, wherein the laser scanning device is a two-dimensional laser scanning device.

26. The image capture system of claim 1, wherein the portable reader subsystem is operable in a single orientation to read coded image information and photo image information.

27. The image capture system of claim 26, wherein the portable reader subsystem has a single optical path.

28. The image capture system of claim 27, wherein the single optical path has a wider angle of view when capturing photo images.

29. The image capture system of claim 27, wherein the single optical path has deeper field of view when capturing photo images.

30. The image capture system of claim 1, wherein the portable reader subsystem comprises a terminal with a reader module.

31. The image capture system of claim 30, wherein the reader module is readily removable.

32. The image capture system of claim 31, wherein the reader module has a connector for ready operative coupling with the terminal.

33. The image capture system of claim 32, wherein the terminal has a display for displaying images captured by the reader module when the reader module is coupled with the terminal.

34. The image capture system of claim 31, wherein the reader module is operative to capture images when removed from the terminal.

35. An image capture system comprising:

an optical reader subsystem in a first configuration providing a coded image and in a second configuration providing a photo image; and

a controller subsystem coupled to the optical reader subsystem for controlling the operation of the optical reader subsystem to capture coded images and photo images.

36. The image capture system of claim 35, further comprising an illumination reflector unit operable in a first position to provide background lighting during capture of a photo image and operable in a second position to provide background illumination during capture of a coded image.

37. The image capture system of claim 35, further comprising image transfer interface circuitry connected to the controller subsystem.

38. The image capture system of claim 35, wherein the controller subsystem further comprises coded image decode circuitry.

39. The image capture system of claim 35, further comprising at least one image buffer.

40. The image capture system of claim 35, further comprises coded image quality determination circuitry.

41. An image capture system comprising:
an optical reader subsystem in a first configuration providing a coded image and in a second configuration providing a photo image,
a display; and
a processor subsystem coupled to the optical reader subsystem and to the display, that controls the operation of the optical reader subsystem to capture coded images and photo images and that transmits captured images to the display for viewing.

42. The image capture system of claim 41, further comprising a user interface coupled to the processor subsystem.

43. The image capture system of claim 41, wherein the processor subsystem further comprises coded image detection circuitry that detects coded images within captured images.

44. The image capture system of claim 43, further comprising coded image selection circuitry that allows a user to select a detected coded image.

45. The image capture system of claim 41, wherein the processor subsystem further comprises coded image decode circuitry.

46. The image capture system of claim 41, wherein the processor subsystem further comprises coded image extraction circuitry that extracts a coded image from a captured image.

47. The image capture system of claim 41, further comprising an illumination reflector unit operable in a first position to provide background lighting during capture of a photo image and in a second position to provide background lighting during capture of a coded image.

48. The image capture system of claim 41, further comprising data transfer circuitry that transmits captured images and receives data.

49. The image capture system of claim 41, wherein the processor subsystem further comprises coded image quality determination circuitry.

50. The image capture system of claim 41, further comprising a least one image buffer.

51. The image capture system of claim 41, wherein the processor subsystem further comprises circuitry that causes captured images to be displayed on the display as they are captured.

52. The image capture system of claim 41, further comprising position feedback circuitry that instructs a user to alter a relative position of the optical reader subsystem with respect to a coded image.

53. An image capture system comprising:
an image capture module comprising:
an optical reader subsystem in a first configuration providing a coded image and in a second configuration providing a photo image; and
a module controller subsystem coupled to the optical reader subsystem, that controls the operation of the optical reader subsystem to capture coded images and photo images; and
a terminal unit coupled to the image capture module, the terminal unit comprising:
a display;
a user interface; and
a terminal unit controller coupled to the display and the user interface, that transmits captured images to the display for viewing and that receives input from the user interface.

54. The image capture system of claim 53, wherein the terminal unit further comprises data communication circuitry that transmits captured images to a remote system.

55. The image capture system of claim 53, wherein the terminal unit controller further comprises coded image decode circuitry.

56. The image capture system of claim 53, wherein the module controller subsystem further comprises coded image decode circuitry.

57. An image capture system comprising;
a photodetector subsystem;
a display;
a user interface; and
a controller subsystem coupled to the display, photodetector subsystem and the interface, the controller subsystem sequentially displaying a plurality of captured images on the display and allowing a user to select at least one image from the plurality of images via the user interface for permanent capture.

58. The method of operating an optical reader capable of capturing two-dimensional images, which comprises
selectively directing the optical reader toward a coded image;
optically reading the coded image to obtain a captured coded image; and
decoding the captured coded image; and
selectively directing the optical reader toward a photo image and obtaining a captured photo image; and
storing the captured photo image.

59. The method of claim 58, said optical reader having adjustable optics, said method further comprising selectively adjusting the adjustable optics of the optical reader for reading coded images and for capturing photo images.

60. The method of claim 58, further comprising adjusting the optics to have a wider field of view when capturing a photo image.

61. The method of claim 58, further comprising adjusting the optics to have a deeper field of view when capturing a photo image.

62. The method of claim 58, wherein the optical reader has a first configuration for capturing coded images, and has a second configuration for capturing photo images, said method further comprising

optically reading coded images with said optical reader in said first configuration; and

directing said optical reader toward a photo image with said optical reader in said second configuration so as to obtain a captured photo image.

63. The method of claim 58, with said optical reader being positionable by a user in a first orientation for reading coded images, and being positionable by the user in a second orientation different from said first orientation for capturing photo images, said method comprising

placing the reader in said first orientation for optically reading a coded image; and

placing the reader in said second orientation during capture of a photo image.

64. The method of claim 58, further comprising;

directing a first field of view of the optical reader toward a coded image to read a coded image to be decoded; and

directing a second field of view of the optical reader toward a photo image to obtain a captured photo image.